

REMARKS

The subject application has been carefully considered in view of the Examiner's action of November 26, 2003. Accordingly, Claim 17 is cancelled; new Claim 22 is added; and Claims 1, 2, 5, 7, 14, 15, 18, 19, 20, and 21 are amended to correct the informalities noted by the Examiner and do not impact the obviousness rejection of any claim.

The drawings have been objected to as not showing an "illuminator" as claimed. Claim 17, which included an "illuminator" as a structural element, is cancelled. This should traverse the requirement to amend the drawing. New Claim 22, which replaces Claim 17, does not claim an illuminator *per se* but instead refers to the scanning means as having an adjustable output voltage that is adjusted responsive to the illuminated intensity of a fiducial mark. This is fully supported by the passage at paragraph [00023] and Figure 5.

1. Claims 7 and 15-21 are rejected under 35 U.S.C. 112 as failing to comply with the enabling requirement. In particular, the Examiner indicates that the specification

"does not describe comparing the fiducial mark closest to the cut edge to the distance that the print is moved and deriving an input signal of the difference between the mark closest to the cut edge and the distance that the calibration print is moved."

The Examiner here apparently is referring to the language of Claim 7.

Paragraph [00029] of the specification says that if any of the fiducial marks A-D or F-G appear closest to the cut edge, it means the actual distance that the print moved is not equal to the theoretical distance that the print should have moved. This determination inherently requires a comparison of the actual difference to the theoretical distance, so there is a comparison of the fiducial mark closest to the cut edge (the chosen feature) to the distance that the print is moved that results in a corrective signal. In the language of the claims, there is a comparison of the "chosen feature" (which is the fiducial mark closest to the cut edge) to the distance that the print is moved, a "deriving" of "an input signal representative of the difference" and applying the input signal to effect a correction of the drive. Accordingly, Applicants consider that the specification is enabling of Claim 7.

With respect to Claims 15-21, the Examiner points out that as disclosed in the specification, the "scanner" only detects and does not do any comparing. Accordingly, Claims 15 and 18-21 are amended to reflect that a "controller" does the actual comparing and correcting as noted by the Examiner.

2. Claims 1-16, 18, 19, and 21 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Brooks (US 4, 960, 336) in view of Diesch (US 4, 163, 405). Brooks concerns a check printer wherein information is required to be printed in a field that is a desired distance “B” from the edge of the check. In Brooks, the printing of the check is initiated upon a blank check moving some distance after the leading edge of the check passes a sensor. Accordingly, the accurate placement of the printing requires calibration of the sensor-to-print head distance (Col. 7, lines 10-15). Calibration of this distance and the appropriate adjustment of the drive for moving the check is accomplished in part by having the check printer print a test pattern on a blank check and determining the position of the test pattern relative to the leading edge of the blank. The Examiner acknowledges that Brooks does not teach a cutter or cutting a calibration print or using a fiducial mark closest a cut edge as the chosen feature to effect the calibration of components of the cutter drive mechanism.

Diesch concerns operation of a cutter for cutting a strip of end-to-end printed photographs into separate prints. The cutter is activated in response to the sensing of a “cut” indicium on the printed strip. Contrary to the Examiner’s interpretation, Diesch does not appear to teach the cutting of a calibration print. Instead, column 5, lines 59, to column 6, line 27, as cited by the Examiner describes the operator as setting a sensor to sense “cut marks”, which are marks printed on the actual strip to be cut into individual prints. The marks denote individual prints on the strip as opposed to any separately printed “calibration print”.

According to Diesch, one of the prints on the strip is fed pass the sensor from cut mark to cut mark, so the print length of the prints on the strip can be determined. Since the cut mark sensor is located less than one print length from the cutting blade, the next operational step is for the operator to set “a feed after sense length”. This is done by first aligning the print edge with a calibration mark on the cutter. Then the strip is advanced to the next cut mark, and this distance is entered as a “feed after sense length” into the cutter control. Accordingly, there is no calibration print *pe se* in that the settings noted above are determined from the actual photographic strip to be cut and not from some separate test strip.

What the rejection proposes is to take a disclosure relating to the calibrating of the drive of a printer that prints individual checks (Brooks) and summarily add to this printer a cutter for separating individual photos from a strip. The basis for the obviousness of making the combination is that it would “make the printer more versatile by providing a cutter in the same device”. This does not establish a *prime facie* case of obviousness, as an Examiner’s observation

that the proposed combination would have improved versatility is no substitute for evidence of a teaching, suggestion, or motivation contained in the references themselves for making the combination.

A rejection of a claim under 35 U.S.C. 103 requires evidence relevant to a finding of whether there is a teaching, motivation, or suggestion to select and combine the references relied on as evidence of obviousness. According to the court in Brown & Williamson Tobacco Corp. v Philip Morris Inc., 56 USPQ2d 1456, 1459 (Fed. Cir. 2000), “a showing of a suggestion, teaching, or motivation to combine the prior art references is an essential component of an obviousness holding”.

The references lack any such suggestion, teaching, or motivation. The invention is the calibration of the drive of a cutter and not a cutter/printer combination. Thus, the combination proposed by the Examiner is irrelevant to the claimed invention.

In addition, the references lack any suggestion, teaching, or motivation of combining their respective teachings as proposed. Brooks prints individual checks. Diesch cuts photos from a strip of photos. Adding the Diesch cutter to the Brooks’ printer would neither perform a useful function nor make the Brooks’ printer “more versatile”, as there is no need to cut individual checks and there is no suggestion in Brooks of printing a strip of checks that would require cutting apart.

Even if Diesch is considered relevant (which it is not), it suggests that the cutter drive should be calibrated differently from the printer drive. In this respect, the calibration of the Brooks’ printer appears to be universal in that once calibrated, the desired information is printed in the appropriate field of each check. In Diesch, the drive requires calibration for each strip of photos that is run through the cutter, so the calibration is not universal to all subsequent strips. The combination proposed by the Examiner does not rationalize these differences.

In Brooks, the printer makes a calibration print and then this calibration print is run back through the printer to calibrate the printer drive. In the present invention, the calibration print produced by a printer is used to calibrate the drive of a separate cutter. There is no suggestion in Brooks for doing this. That is, there is no suggestion in Brooks that the printed calibration piece be used in a subsequent calibration operation to calibrate the drive of a different apparatus other than the apparatus producing the calibration piece.

As there is no rationalization of these issues and clearly no teaching, suggestion, or motivation to be found in the references themselves, the rejection cannot be sustained.

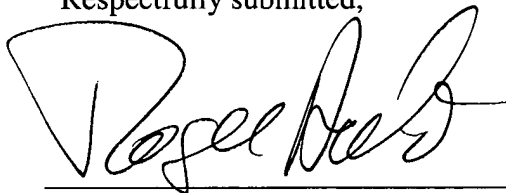
3. Claims 17 and 20 stand rejected under 35 U.S.C. 103 (a) as being unpatentable over Brooks in view of Diesch and further in view of Tabor (US 6, 018, 687). Note that Claim 17 is cancelled and is rewritten as new Claim 22 to address the indefinite issues raised by the Examiner.

Applicants' comments as noted above with respect to Brooks and Diesch are repeated. The lack of any motivation in either Brooks or Diesch to effect the proposed combination also would be sufficient to traverse the rejection when Tabor is added to the combination. In addition, Tabor is said to disclose means for adjusting "the intensity of an illuminator responsive to a voltage of a scanner responding to a fiducial mark being different than a preset voltage". Applicants disagree. What the cited passage of Tabor says is that the digital output signal of the scanner depends upon whether the image at the measured point reflects enough light to exceed the threshold of the scanner's comparator and that this threshold of sensitivity may be selectively adjusted (presumably to accommodate the existing lighting).

Adjusting the threshold of sensitivity is contrary to changing the intensity of the illumination as set out in Claims 20 and 22. In particular, Tabor does not suggest setting a preset voltage related to a desired intensity of the illumination of the fiducial mark and then having a controller adjust the preset voltage to increase or decrease the illumination of the fiducial mark responsive to a measurement of the actual fiducial mark illumination as set out in Claim 20.

Accordingly, in view of the above amendments and comments, Applicants consider that the claims remaining in the case are in condition for allowance which action is respectfully requested.

Respectfully submitted,



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